



Learn more 

Windows® MultiPoint® Server 2011

Give more students access to computing

Your name & title here

Agenda

- Realizing the Promise of Technology for Education
- Shared Resource Computing:
Introducing Windows MultiPoint Server 2011
- How WMS 2011 Drives Benefits for Education
 - More Computing for a Lower Cost of Acquisition and Ownership
 - Engaged Students, Empowered Educators
 - Simple Technology, Working for You
- A Path Toward Personalized Computing
- Next Steps

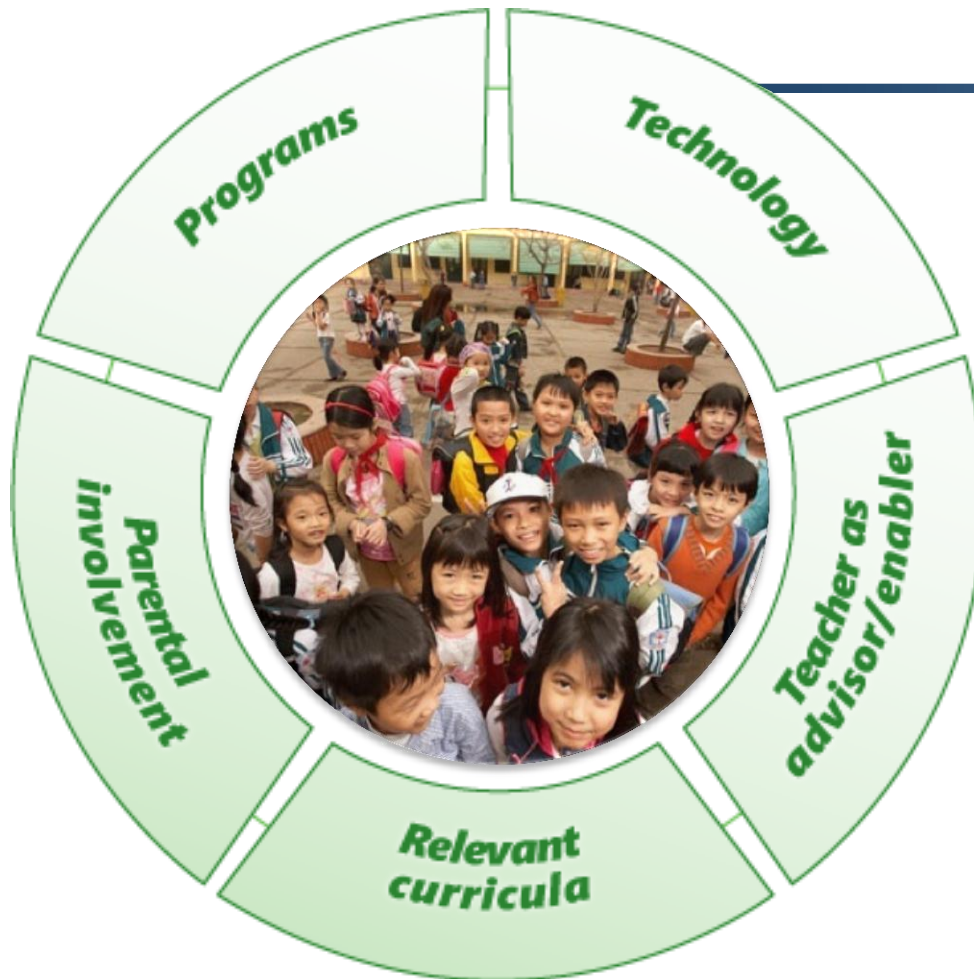
Education is key to sustained social and economic opportunity

***Enabling individuals to
realize their full potential...***



***...and nations to compete in a
21st century global marketplace***

Combined with other forces, technology has the potential to transform and extend the reach of quality education



To realize this potential, technology must be:

- **Relevant**
- **Accessible**
- **Affordable**

But educators face multiple challenges to realize the promise of technology

- High student to PC ratios
- Limited budgets for new PCs
- Aging technology (long refresh cycles)
- Limited professional IT support resources
- Limited ICT skills among teachers
- Limited physical infrastructure, e.g. electricity
- Need to reduce energy costs and/or be energy efficient
- Multilingual support requirements
- Pressure to close the "digital gap"



Shared Resource Computing (SRC) helps reduce the total cost of ownership for school computing

- What is it?
 - One computer
 - Multiple users
- Lowers costs of
 - Hardware acquisition
 - Operating expenses
 - Management & maintenance
 - Energy and power



Instead of students taking turns on one computer or passively observing as one student operates the computer...



Windows MultiPoint Server 2011 can give each student an independent and personalized computing experience



Windows MultiPoint Server 2011 Key Benefits for Customers

**More
Computing at
Lower Total
Cost of
Acquisition
and Ownership**



**Engaged
Students,
Empowered
Educators**



**Simple
Technology,
Working for
You**



Windows MultiPoint Server 2011 Key Benefits for Customers

**More
Computing at
Lower Total
Cost of
Acquisition
and Ownership**

- Provide More Student Access to Computing
- Reduce Upfront Costs
- Reduce On-going Operational & Energy Costs



Provide More Student Access to Computing



A Windows MultiPoint Server 2011 solution can:

- Enable one host computer to serve multiple students
- Turn a large monitor into two separate screens
- Be easily scaled as needs grow
- Provide a path toward 1:1 computing

Reduce Upfront Costs



A Windows MultiPoint Server 2011 solution can help:

- Reduce initial hardware acquisition costs
- Revitalize older or donated equipment
- Enable purchase of just the right amount of technology

Reduce On-going Operational and Energy Costs



A Windows MultiPoint Server 2011 solution can help:

- Reduce the number of computers maintained and supported
- Lessen the training and support required for teachers
- Reduce power consumption and costs
- Reduce heat generation and cooling costs

WMS 2011 Customer Story: Bellevue School District, Bellevue, WA



..we saved \$70,000 on hardware by purchasing Multipoint Servers instead of individual desktops. We saved \$60,000 on network switches due to the reduced amount of ports needed, and about \$5,000 on networking cabling, for a total of \$135,000 in savings”.

**Jason Golec, Network Operations Manager
Bellevue School District**

Microsoft

Windows MultiPoint Server 2011 Key Benefits for Customers

Engaged Students, Empowered Educators

- Orchestrate Personalized Learning Experiences
- Deliver a Robust Learning Environment
- Enable teachers and students to become productive quickly



Orchestrate a Personalized Learning Experience for Students



A Windows MultiPoint Server 2011 solution can help teachers:

- Easily monitor and guide student usage
- Use the technology to enhance teaching and learning methods
- Leverage educational resources available for the Windows platform

Easily monitor and guide student usage

The screenshot displays the MultiPoint Manager interface. At the top, there are navigation icons for Home, Desktops, Stations, and Users. Below these are several station thumbnails, each with a unique background image and identifying text such as 'dparon-1293 4 james' and 'contosowms2 2 Srimi'. On the right side, a 'Selected Item Tasks' menu is open, listing actions like 'Enlarge thumbnail', 'Block this station', and 'Limit web access on this station'. Below this menu is a 'General Tasks' section with actions like 'Block all stations' and 'Limit web access on all stations'. Two callout boxes with arrows point to the menu: one labeled 'Actions for selected thumbnails' pointing to the 'Selected Item Tasks' section, and another labeled 'Actions for all stations' pointing to the 'General Tasks' section.

Actions for selected thumbnails

Actions for all stations

Deliver a Robust Learning Environment



A Windows MultiPoint Server 2011 solution can help students:

- Work independently
- Collaborate with peers
- Find, use, and share information effectively
- Save their work on a file share or a private USB
- Work in their own language
- Gain useful workplace skills

Provide Students the Latest Windows 7 Experience

Students can use the latest technology:

- Internet Explorer
- Windows Media Player
- Windows Search, Paint and more
- Private use of head phones
- Easy printer access
- Split screen: turn one monitor into two
- Customizable desktop
- Log-on from any station to access saved settings (applications, folders)



WMS 2011 Customer Story:

Sultan School, District WA, USA



One of the things I hear [about] most from teachers is the ability to direct their students, to keep them on task, on focus... With Windows MultiPoint Server they can actually decide where the kids can go. They can build a list of sites that they want the kids to visit or explicit sites that they don't want the kids to visit. ... They can send them a message saying hey, get back on task. The teachers are just lovin' it.

– Dave Moon, IT Director, Sultan School District

Windows MultiPoint Server 2011 Key Benefits for Customers

**Simple
Technology,
Working for
You**



- Manage fewer computers
- Choose the configuration that is right for you
- Easily administer the entire computing solution
- Get the peace of mind of a secure, supported Microsoft solution

Choose the configuration that is right for your needs



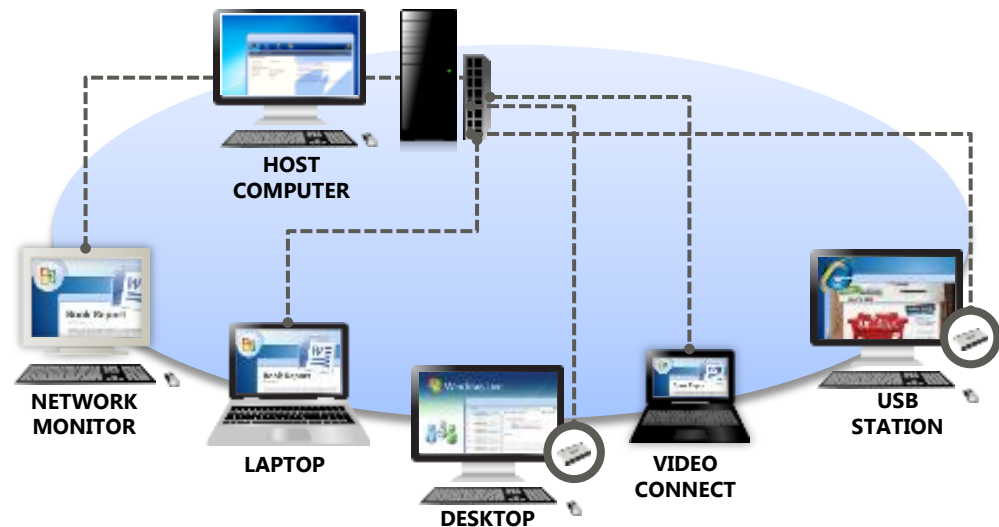
A Windows MultiPoint Server 2011 solution can:

- Be easily set up right "out-of-the-box"
- Accommodate a variety of physical, technical, and educational needs
- Integrate into your existing Windows infrastructure

Accommodating physical, technical and educational needs

Considerations include:

- Performance demands of applications to be used
- Location and physical set up of the stations (clustered together in “pod” or spread out across one or more rooms)
- Older or donated hardware available for stations
- Peripherals (printers) needed for shared or private use
- Skills of IT support resources
- Scope and complexity of other IT needs



Easily administer the entire student computing solution



A Windows MultiPoint Server 2011 solution can:

- Allow teachers to easily administer connected stations and student accounts
- Enable teachers to access non-WMS applications from the WMS console
- Enable a teacher or administrator to easily manage multiple WMS systems

Easily administer connected stations and student accounts

- See who is logged on at each station
- Set up auto-logon for stations
- Get alerts about status of station hardware
- Suspend or disconnect stations

- Add or delete student accounts
- Set access levels, passwords

Launch a local application **

Custom tab(s) here

The screenshot shows the MultiPoint Manager interface with a navigation bar at the top containing icons for Home, Desktops, Stations, and Users. Below the navigation bar is a data table with the following structure:

User	Computer	Full Name
contosowms2		
Administrator	contosowms2	
Guest		

Administer multiple WMS systems from a single console

The screenshot shows the MultiPoint Manager console interface. At the top, there are navigation icons for Home, Desktops, Stations, and Users. The main area displays a table of managed servers. A context menu is open over the selected row, showing various administrative tasks.

Computer	Status	Product	Stations	Licenses	Mode
Local					
contosowms2	Connected	Windows MultiPoint Server 2011 Premium	3	4	Normal
Managed					
contosowms3	Connected	Windows MultiPoint Server 2011 Premium	4	5	Normal

Selected Item Tasks

- Edit server settings
- Restart the computer
- Shut down the computer
- Switch to maintenance mode
- Add client access licenses
- Remove client access licenses

Get the peace of mind of a Microsoft solution



With a MultiPoint Server 2011 solution, you gain:

- A broad ecosystem of authorized partners
- Automatic or selective updates and patches
- Technical support and assistance
- Security advancements of the latest Windows version
- Educational applications available for the Windows platform

WMS 2011 Customer Story:

Sultan School, District Washington, USA



With 2011's management console I can now connect multiple servers at the same time... from my desktop I can log in, look at all the servers that are in that school and pinpoint the error. I can see that a keyboard's unplugged, I can see a software error on their screen, actually see their screen, ...and be able to troubleshoot without the need to drive over there ... I can solve a problem in minutes instead of longer.

Dave Moon, IT Director, Sultan School District

A path toward personalized computing

1:1

One device per student
(netbook or laptop)



Shared

School computer labs



1:Many

Multiple students
accessing one
computer



First PC

Instructional PC in
a classroom



No PCs

Community access



Microsoft Learning Essentials
for Microsoft® Office 2.0

Microsoft
Live@edu

Next steps

- Download and evaluate Windows MultiPoint Manager 2011:
<http://www.microsoft.com/downloads/en/details.aspx?FamilyID=3188a587-3542-4dda-99b3-551cdabe581f>
- Contact **[insert contact details here]**, for more information
- Learn more about Windows MultiPoint Manager 2011:
www.microsoft.com/multipoint **[change to local URL if available]**
- **Add any local Next Steps or Calls-to-Action here**

Thank you

Microsoft[®]

Your potential. Our passion.[™]

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Appendix

The appendix provides additional slides that you may want to include in the main presentation, including:

- Run multiple languages
- Connecting WMS 2011 stations directly to the host computer
- Connecting WMS 2011 stations to the host computer over a LAN
- How to acquire WMS 2011 (licensing SKUs)
- Host computer hardware recommendations

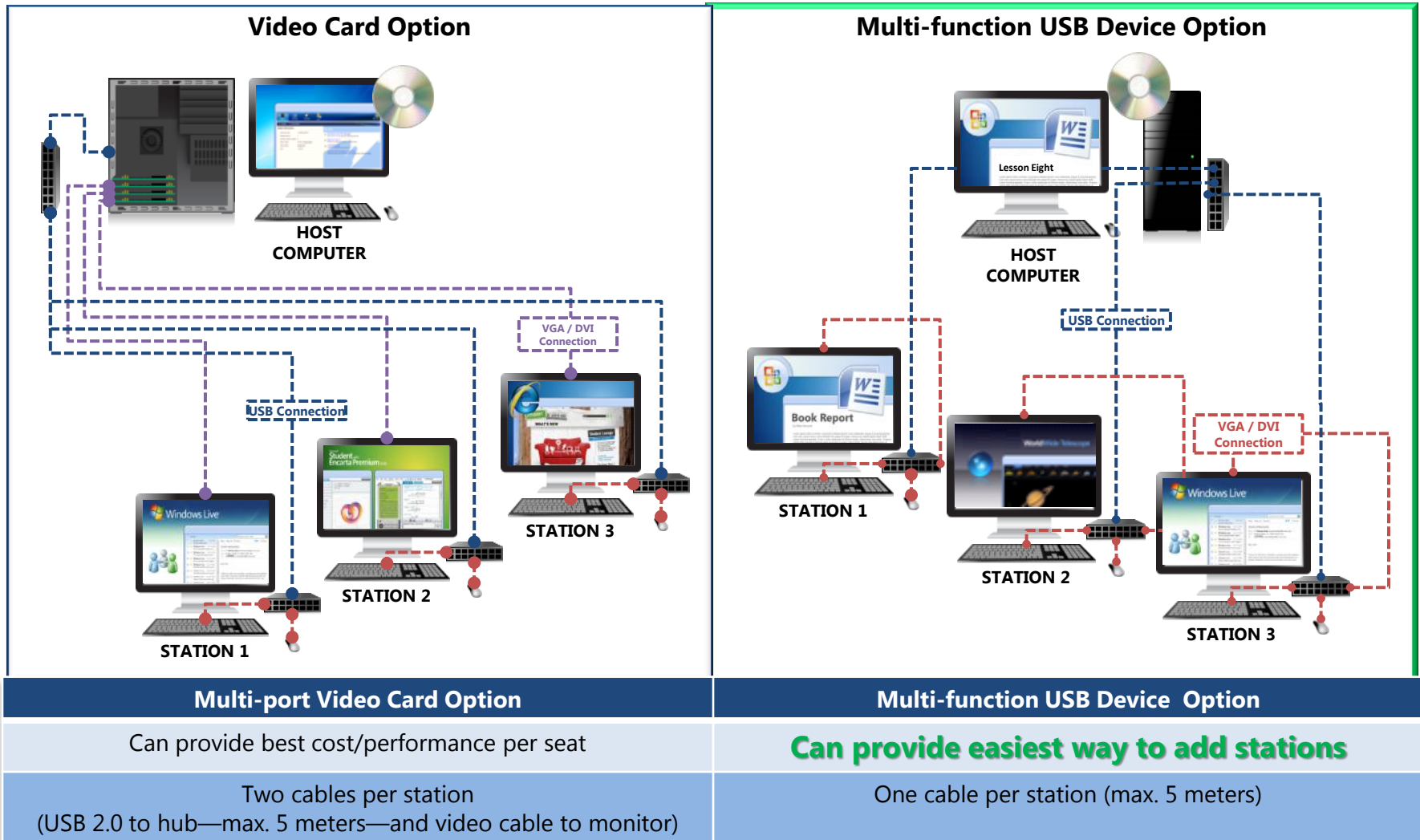
Run multiple languages with Windows MultiPoint Server 2011

- 16 available for the end-to-end solution
- 20 language packs can be installed on the same host for use at student stations (but not for MultiPoint Manager)
- Different stations can run different languages at the same time

- | | | |
|-----------------------|--------------|--------------------------|
| ▪ Chinese Traditional | ▪ German | ▪ Portuguese (Brazil) |
| ▪ Chinese Simplified | ▪ Hungarian* | ▪ Portuguese (Portugal)* |
| ▪ Chinese HK* | ▪ Italian | ▪ Russian |
| ▪ English | ▪ Japanese | ▪ Spanish |
| ▪ French | ▪ Korean | ▪ Turkish |
| | ▪ Polish* | |

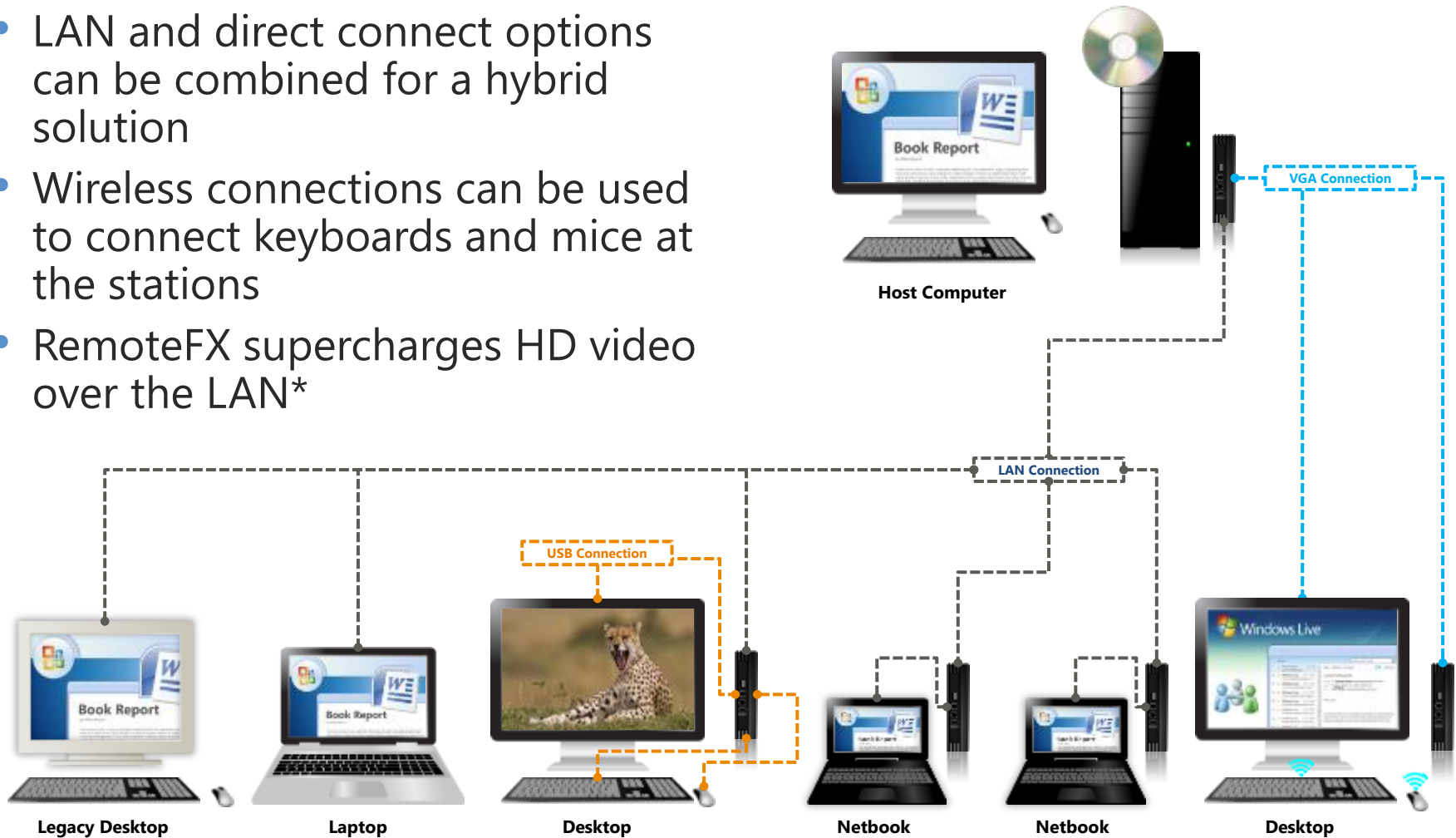
* New in MultiPoint 2011

Connecting WMS stations directly to host computer



Connecting WMS2011 stations to the host computer over a LAN

- LAN and direct connect options can be combined for a hybrid solution
- Wireless connections can be used to connect keyboards and mice at the stations
- RemoteFX supercharges HD video over the LAN*



* RemoteFX impacts system performance. Refer to System Requirements slides for recommended host specifications.

How to license Windows® MultiPoint™ Server 2011

	Windows® MultiPoint™ Server 2011 Standard	Windows® MultiPoint™ Server 2011 Premium
Channel	Pre-installed by an OEM Volume Licensing - Open Commercial	Pre-installed by an OEM or Academic OEM Volume Licensing - Academic Volume Licensing - Open Commercial
Number of Simultaneous Connected Stations	Maximum of 10 *	Maximum of 20 *
CAL	OEM: Windows® MultiPoint™ Server 2011 Client Access License (CAL) – each station and host computer, if used as a station VL: Windows® MultiPoint™ Server 2011 CAL with Windows® Server 2008 CAL – each station and host computer, if used as a station	

* Actual number of connected stations is based on host computer hardware capacity (CPU, memory, etc.), station hardware configuration (RemoteFX, PCI-E or USB) and usage workloads.

Host Computer Minimum Configurations

These recommendations represent a rough guideline. Actual sizing requirements depend on the particular workload and hardware. Always validate sizing using your own applications and hardware.

Application scenario	Up to 4 stations	5-6 stations	7-10 stations	11-14 stations	15-20 stations
Productivity Office, Web browsing, line-of-business applications	CPU: 2C ¹ RAM: 2GB	CPU: 2C RAM: 4GB	CPU: 4C ¹ RAM: 6GB	CPU: 4C RAM: 8GB	CPU: 4C+MT or 6C ¹ RAM: 8 GB
Mixed Productivity plus: Occasional video use by some users	CPU: 2C RAM: 2GB	CPU: 2C RAM: 4GB	CPU: 4C RAM: 6GB	CPU: 4C+MT or 6C ¹ RAM: 8GB	CPU: 4C+MT or 6C RAM: 8 GB
Video intensive² Productivity plus: Frequent video use by all users	CPU: 2C RAM: 2GB	CPU: 4C RAM: 4GB	CPU: 4C+MT or 6C RAM: 6GB	CPU: 4C+MT or 6C RAM: 8GB	CPU: 4C+MT or 8C RAM: 8 GB Thin Client: RemoteFX ³ USB video not recommended

¹ - 2C = 2 cores, 4C = 4 cores, 6C = 6 cores, MT = Multithreading

² - Video testing was performed using 360p H.264 video at its native resolution

³ - RemoteFX, or equivalent technology for RDP, is required when 15 – 20 remotely connected thin clients running full motion video within their session